

off the surface of the roll 20, forming the discharge means for the tape. During the continued rotation, the holes 48 are covered by the adjacent end wall of the manifold 60. The pressure holding the tape on the surface of the roll 20 over the holes 50 is not such that the roll 20 cannot move faster than the tape 11, allowing slippage of the tape 11 on the roll 20, which tape is held at a given speed by the feed roll 16.--

In the claims:

Please cancel claims 1-12 and 19-23 without prejudice.

Please amend the remaining claims as follows:

13. (Amended) A tape assembly for feeding a predetermined length of tape onto a substrate in predetermined registry with the substrate, said feed assembly comprising:
a feed roll for advancing tape from a supply thereof along a predetermined path at a first speed;
a vacuum roll with an anvil insert for accepting a said tape from said feed roll;
a drive for said vacuum roll to provide a predetermined peripheral speed thereof different than said first speed for advancing said tape toward an applicator in predetermined lengths;
a rotary knife having blade means engageable with said vacuum roll for cutting said tape against said vacuum roll; and
a motor controller means for changing said first speed and said predetermined speed to adjust the length of tape advancing on said vacuum roll before being cut by said rotary knife driven at said predetermined speed.

14. (Amended) A tape feed assembly according to claim 13, wherein said applicator comprises a vacuum wheel applicator for receiving said cut tape and placing said cut tape on a substrate, drive means for said vacuum wheel applicator to move a said cut tape from said vacuum roll to said substrate, drive means for rotating said vacuum wheel applicator, said vacuum roll drive means and said drive means for said vacuum wheel applicator affording peripheral speeds different than that of said feed roll, and an adjustable control for affording the

desired length of tape to be dispensed and variations in the registration of said tape on a substrate.

15. (Amended) A tape feed assembly according to claim 14 comprising a signal generator for detecting the movement of a said substrate and for controlling said adjustable control and motor control for operating said vacuum roll and said rotary knife to place the predetermined length of tape in the desired position on the substrate.

16. (Amended) A tape feed assembly according to claim 13, further comprising an adhesion preparation means for preparing the length of tape as it is passed between said vacuum roll and the substrate.

17. (Amended) A tape feed assembly according to claim 16 wherein said adhesion preparation means comprises a heater.

18. (Amended) A tape feed assembly according to claim 13, wherein said drive for said vacuum roll includes a line speed encoder, a programmable logic controller and motor controllers for the feed roll drive and for the vacuum roll drive to provide a tape drive speed that will meet at least one production run requirement.

Please add the following new claims:

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24. (New) A web material feed assembly, comprising:
a feed roll configured to advance web material along a predetermined path;
a vacuum roll configured to receive the web material advanced by the feed roll;
a rotary knife positioned near the vacuum roll, and configured to engage the web material at a location on the vacuum roll to cut the web material into a cut web material length; and
an applicator configured to advance the cut web material length onto a substrate;
wherein the feed roll, the vacuum roll, and the rotary knife are configured so that the respective peripheral speed of each of the feed roll, the vacuum roll, and the rotary knife are

controllable such that the length of the cut web material length may be adjusted and the cut web material length may be registered with the substrate.

25. (New) A web material feed assembly according to claim 24, wherein the peripheral speed of rotary knife and the vacuum roll are controllable so that the timing of the cutting of the web material at a location on the vacuum roll defines the registry of the cut web material length with the substrate.

26. (New) A web material feed assembly according to claim 24, wherein the substrate is not a continuous substrate.

27. (New) A web material feed assembly according to claim 24, wherein the substrate comprises an individual carton blank.

28. (New) A web material feed assembly according to claim 24, wherein the peripheral speed of the feed roll, the vacuum roll, and the rotary knife are controllable so that the peripheral speed of the vacuum roll and the rotary knife is equal to or greater than the peripheral speed of the feed roll.

29. (New) A web material feed assembly according to claim 28, wherein the peripheral speed of the vacuum roll and the peripheral speed of the rotary knife are the same.

30. (New) A web material feed assembly according to claim 24, further comprising:
a first sensor positioned to detect a location on the substrate for applying the web material to the substrate and generate a first signal identifying the location;
a second sensor positioned to detect the rotational position of the rotary knife and generate a second signal identifying the rotational position; and
a controller configured to receive the first signal and the second signal and control the peripheral speed of at least the rotary knife or the vacuum roll in response to the first signal and the second signal.

31. (New) A web material feed assembly according to claim 24, wherein the applicator comprises a vacuum wheel applicator.

32. (New) A web material feed assembly, comprising:
a feed roll configured to advance web material along a predetermined path;
a vacuum roll configured to receive the web material advanced by the feed roll;
a rotary knife positioned near the vacuum roll and configured to engage the web material at a location on the vacuum roll to cut the web material into a cut web material length; and
a vacuum wheel applicator configured to receive the cut web material length and advance the cut web material length onto a substrate, the vacuum wheel applicator defining a continuous foraminous cylindrical peripheral surface.

33. (New) A web material feed assembly according to claim 32, wherein the feed roll, the vacuum roll, and the rotary knife are positioned such that the web material can be retained on a portion of the vacuum roll prior to being cut by the rotary knife.

34. (New) A web material feed assembly according to claim 32, wherein the substrate is not a continuous substrate.

35. (New) A web material feed assembly according to claim 32, wherein the substrate comprises an individual carton blank.

36. (New) A web material feed assembly according to claim 32, wherein the peripheral speed of the feed roll, the vacuum roll, and the rotary knife are controllable so that the peripheral speed of the vacuum roll and the rotary knife is equal to or greater than the peripheral speed of the feed roll.

37. (New) A web material feed assembly according to claim 36, wherein the peripheral speed of the vacuum roll and the peripheral speed of the rotary knife are the same.

38. (New) A web material feed assembly according to claim 32, further comprising:

a first sensor positioned to detect a location on the substrate for applying the web material to the substrate and generate a first signal identifying the location;

a second sensor positioned to detect the rotational position of the rotary knife and generate a second signal identifying the rotational position; and

a controller configured to receive the first signal and the second signal and control the peripheral speed of at least the rotary knife or the vacuum roll in response to the first signal and the second signal.

39. (New) A web material feed assembly according to claim 32, further comprising an adhesion preparation means for activating the web material.

40. (New) A web material feed assembly according to claim 39, wherein the adhesion means comprises a heater.

41. (New) A web material feed assembly according to claim 32, wherein the web material contacts between 90 and 200 degrees of the periphery of the vacuum roll.

42. (New) A web material feed assembly, comprising:
feed means for advancing web material along a predetermined path;
receiving means for receiving the web material advanced by the feed means;
cutting means positioned near the receiving means for engaging the web material at a location on the receiving means to cut the web material into a cut web material length; and
applicator means for advancing the cut web material length onto a substrate;
wherein the feed means, the receiving means, and the cutting means are controllable such that the length of the cut web material length may be adjusted to provide a cut web material length that is in registry with a substrate.

43. (New) A method for feeding web material onto a substrate, comprising:
introducing a web material onto a vacuum roll;
advancing the web material on at least a portion of a foraminous peripheral surface of the vacuum roll;

cutting the web material after it has advanced on the portion of the foraminous peripheral surface of the vacuum roll to form a length of web material; and

introducing the length of web material onto a vacuum wheel applicator for advancing onto a substrate.

44. (New) A method according to claim 43, further comprising cutting the substrate after the length of web material is introduced onto the substrate so that the web material forms a cutting edge.

45. (New) A method according to claim 43, wherein the web material advances on 90 to 200 degrees of the foraminous peripheral surface of the vacuum roll prior to being cut.

46. (New) A method according to claim 43, wherein the web material comprises an adhesive tape, and the method further comprises activating the adhesive on the tape as the tape advances on the vacuum wheel applicator.

47. (New) A method according to claim 43, wherein the method further comprises feeding web material onto a plurality of individual substrates, and controlling the timing of each cutting of the web material so as to register the position of each length of web material with a predetermined location for each length of web material on each individual substrate.

48. (New) A method according to claim 47, further comprising identifying the predetermined location for each length of web material on each individual substrate, and supplying the identified predetermined location information to a controller configured to control the timing of each cutting of the web material.

49. (New) A method according to claim 48, wherein the predetermined location for each length of web material on each individual substrate comprises a leading edge of each individual substrate.

50. (New) A method for feeding web material onto a plurality of individual carton blanks, comprising:

continuously introducing a web material onto a vacuum roll;
cutting the web material on the vacuum roll to form a length of web material;
continuously applying each length of web material onto each individual carton blank; and
controlling the timing of each cutting of the web material so as to register the position of each length of web material with a predetermined location for each length of web material on each individual carton blank.

51. (New) A method according to claim 50, further comprising cutting the individual carton blank after the length of web material is introduced onto the individual carton blank so that the web material forms a cutting edge.

52. (New) A method according to claim 50, further comprising identifying the predetermined location for each length of web material on each individual carton blank, and supplying the identified predetermined location information to a controller configured to control the timing of each cutting of the web material.

53. (New) A method according to claim 52, wherein the predetermined location for each length of web material on each individual carton blank comprises a leading edge of each individual carton blank.

54. (New) A method according to claim 50, wherein the length of the length of web material is continuously changed according to the length of the individual carton blank.